

F
444
C9C9



Class _____

Book _____

COPYRIGHT DEPOSIT



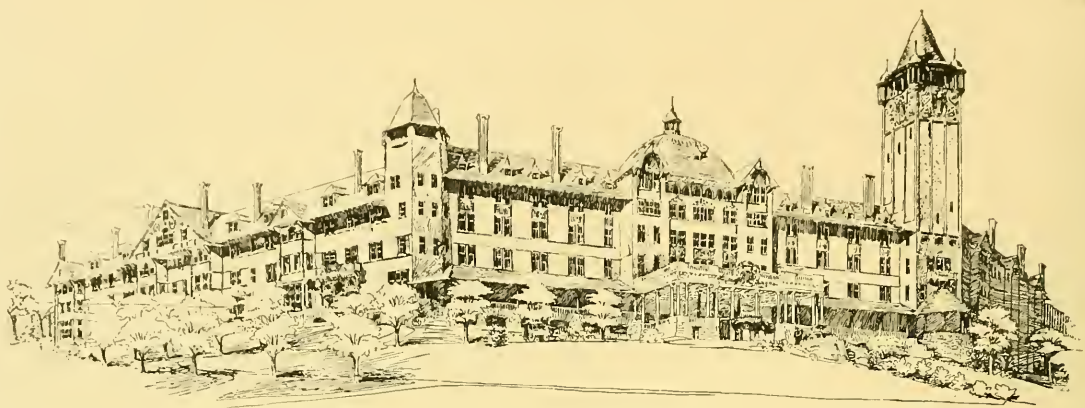
Cumberland

Cumberland Gap Park

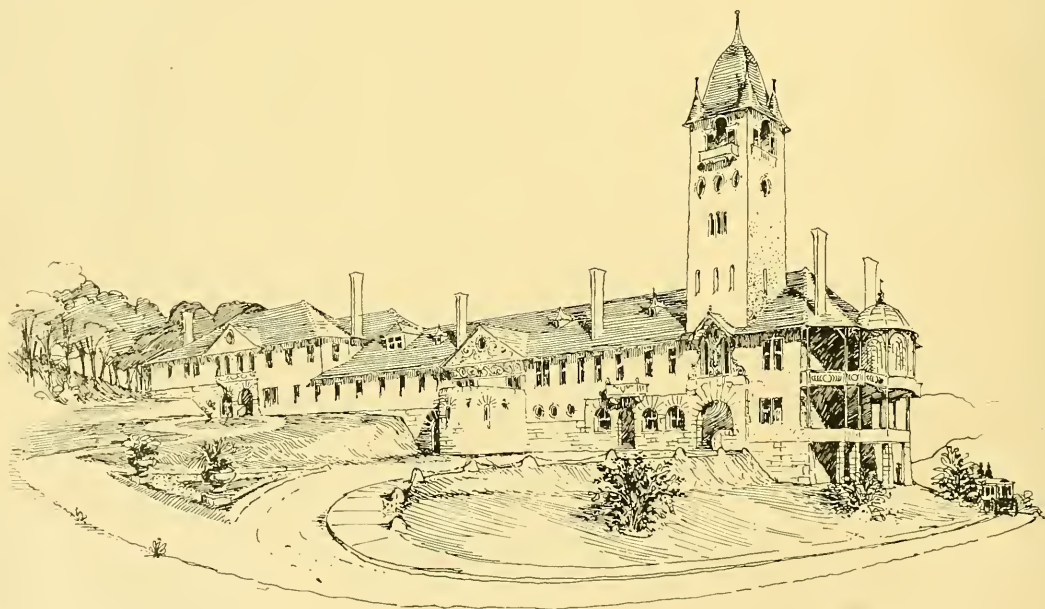
Situated near Cumberland Gap
Tenn.



A
LUXURIOUS
HEALTH RESORT



THE "FOUR SEASONS" HOTEL



THE SANATORIUM

CUMBERLAND GAP PARK

(THE PROPERTY OF THE CUMBERLAND GAP PARK COMPANY)
(INCORPORATED UNDER THE LAWS OF TENNESSEE, U. S. A.)



HOTEL, CASINO, AND SANATORIUM

AT THE

CUMBERLAND GAP



NEAR THE POINT OF MEETING OF THE STATE LINES OF
TENNESSEE, VIRGINIA, AND KENTUCKY

Copyright, 1891, by the Cumberland Gap Park Co.

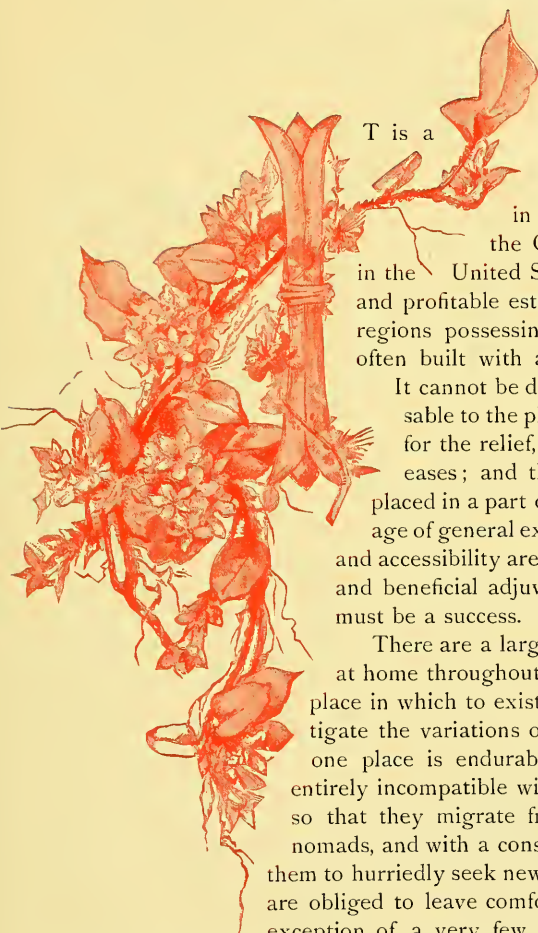
THE DE VINNE PRESS.

F 4 79
0909



Cumberland Gap Park.

Tennessee, Kentucky, Virginia.



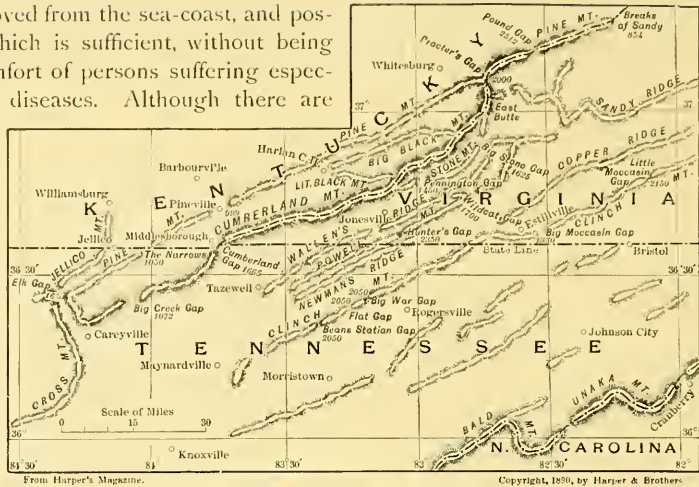
It is a somewhat remarkable fact that no well-conducted health resort or Sanitarium exists in America to-day, such as are to be found in many parts of the United Kingdom or the Continent. It is true that in various places in the United States there are a number of well-patronized and profitable establishments which, as a rule, are located in regions possessing natural attractions, but these are very often built with an utter disregard of all sanitary laws.

It cannot be denied that certain natural aids are indispensable to the physician, though often disregarded as means for the relief, especially, of exhausting and chronic diseases; and the establishment of a well-managed resort, placed in a part of the country which possesses a high average of general excellence, so far as climate, altitude, drainage and accessibility are concerned, not to speak of such attractions and beneficial adjuvants as mineral springs and hydrotherapy, must be a success.

There are a large number of invalids who are unable to stay at home throughout the year, but make it a study to find some place in which to exist. These people with surprising care investigate the variations of climate and soil. They soon learn that one place is endurable in January and February, and another entirely incompatible with health or comfort during these months, so that they migrate from one resort to another, as restless as nomads, and with a constant fear of a change of air that will compel them to hurriedly seek new abiding-places. Many of these individuals are obliged to leave comfortable and luxurious homes, and, with the exception of a very few well-built hotels, most of the places they frequent are of the ordinary summer-hotel order. Comfort to the invalid is a prime necessity; "roughing it" is out of the question; and the change from home should be an imperceptible one.

The claims of East Tennessee as a health resort are certainly second to none on the American Continent, situated as it is in the very center of the United States at about the

36th parallel, far removed from the sea-coast, and possessing an altitude which is sufficient, without being too great, for the comfort of persons suffering especially from pulmonary diseases. Although there are many health resorts in America that are sought after, and for the most part well patronized, during the winter months, there is none of which we are aware that possesses the average advantages of the region about Cumberland Gap. The shortcomings of better known places are manifold, some being low and swampy and possessing the only merit



of a warm winter climate, while the altitude of others is perchance most trying unless the patient seeks them with the approval of an intelligent and discriminating physician, for he is very apt to suffer various discomforts and possibly an aggravation of his condition. Colorado, for instance, is a beautiful place, and is certainly one in which a limited number of consumptives can live in greater comfort than elsewhere, but it is undisputable that a large number of patients who find their way there are obliged to leave soon afterward, when a pulmonary hemorrhage, or high degree of nervousness, signals the detrimental effect of a too rarified air. Observant medical men cannot disregard the fact that epileptics and other nervous sufferers are much worse in high mountainous countries, and other forms of convulsive and spasmodic disorders are aggravated by a residence in these places. In certain parts of the Rocky Mountains, notably at Leadville, there is a local form of nervous disturbance which is expressed by congestion of the brain, restlessness, with reactionary fatigue and sometimes a condition of excitement which often approaches insanity in degree.

The resorts of the far South are apt to be malarial, the nights are damp, and the glare of the sun during the day is exceedingly disagreeable.

In the selection of an all-the-year-around home for invalids, many things are to be considered, but of course the geographical situation is of paramount importance. It cannot be denied that those regions lying between the 30th and 40th parallels are the most healthful in the United States, and a point somewhat between these extremes has been found by actual statistics to furnish the lowest death-rate, so far as natural causes are concerned.

The district immediately east of the Appalachian Chain, in which is situated Claiborne County, Tennessee, has always maintained a high reputation, so far as the low death-rate and infrequency of illness are concerned. Not only does this region, but that lying close by in North Carolina, present phenomenal statistics. The census of 1880, as well as the reports of the Chief Signal Officer of the United States, give the following ratio of deaths from consumption in Claiborne County, Tennessee, as compared to that of other places:

In 100,000 of Population.

Claiborne County, Tenn.	67
Illinois	150
Missouri	152
Ohio	171
Indiana	193
New Jersey	234
Pennsylvania	150
Michigan	159
Maryland	177
New-York	207
New Hampshire	243
Massachusetts	277

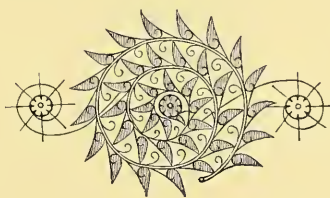
In the "Introductory and Explanatory Remarks" to the volume of Mortality and Vital Statistics, Census of 1880, the Editor says :

"Probably one of the best methods of comparing the healthfulness of the States and Territories, which the census figures will permit us to use, is by a comparison of the proportion of deaths reported as occurring among those infants born during the Census Year."

A table from such data shows as follows :

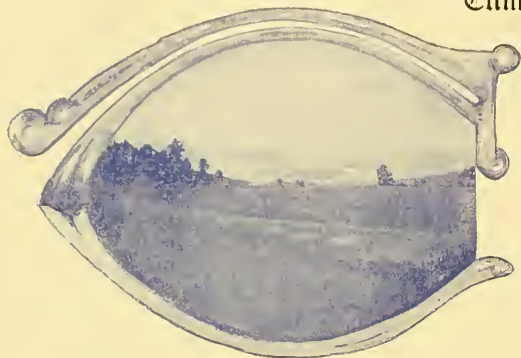
Claiborne County, Tenn., 77.7; Ohio, 112; Kansas, 114; California, 117; Illinois, 122; Massachusetts, 200.

It will be seen that thirty-four more infants reach one year of age, in the thousand, born in Claiborne County than in Ohio, and one hundred and twenty-two more than in Massachusetts.





Climate.



THE climate is a mean between that of North and South, and persons from every section would not have to pass through that sometimes critical condition called "becoming acclimated."

The summer at Cumberland Gap would have a mean temperature of about 70 degrees F., while the winter would have one of about 40 degrees, or about 8 degrees above freezing. Compare the winter mean with that of St. Paul, Minnesota, 17 degrees; Des Moines, Iowa, 23 degrees;

Albany, N. Y., 25 degrees; Detroit, Michigan, 26 degrees; or Columbus, Ohio, a trifle over 32 degrees, or the temperature at which water freezes.

Absolute Humidity.

Absolute humidity is the amount of moisture in a cubic foot of air.

Expressed in Grains.

Table of absolute humidity expressed in a scale of ten; ten being complete saturation.

	<i>Spring.</i>	<i>Summer.</i>	<i>Autumn.</i>	<i>Winter.</i>
San Antonio, Texas.....	5.5	7.5	5.5	3.0
Cumberland Gap Region.....	2.5	6.5	4.0	2.5

Rainfall.

During the autumn and winter months the rainfall is ten inches less than throughout the greater part of Ohio, Indiana and Illinois. This is of the highest importance to the seeker after health, as it admits of a great deal of outdoor exercise in a dry air on dry ground.

When we examine the statistics of temperature, we are immediately impressed with the fact that the extremes are anything but great, the summer heat never being relaxing, nor the winter so cold as to be trying to the delicate. Even in the hottest summer weather the nights are cool.

The air of this region is exceedingly pure and bracing, though there is none of the over-stimulation which is often found in places of higher altitude.

The elevation is from 1100 to nearly 3000 feet above the sea, and the valley east of Cumberland Gap is surrounded by an amphitheater of hills which fully protect it from strong winds, while the character of the soil and its surface render drainage as near perfection as it possibly could be. The prevailing winds are southwest, northeast, north, south, west, east, calm, northwest, southeast ; in the order of frequency.

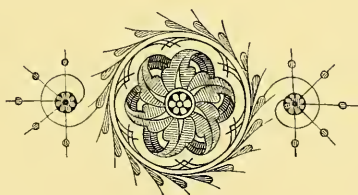
It will be noted by the medical man that such a region possesses unusual advantages for the establishment, not only of a place for treatment, but that it will undoubtedly be chosen, when known, by persons of delicate health as a permanent abode.

Captain, now Dr. William M. Polk, who, during the late Civil War, spent some time at Cumberland Gap, says : "There is no healthier spot in America."

Where the *average* advantages are so great, it will be no longer necessary to take long and tiresome journeys hither and thither winter and summer, with all the incident fatigue of travel—its discomforts and the possible aggravation of existing maladies by sudden variations in the mode of life, food, water and local surroundings.

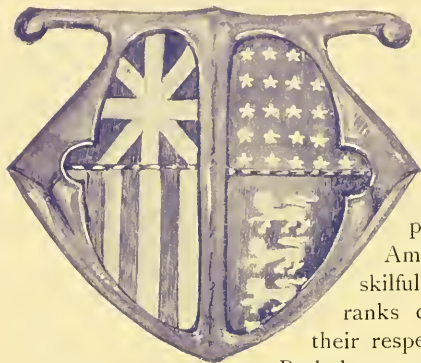
For the relief of pulmonary, nervous and skin affections, it will be seen at a glance that Cumberland Gap offers a decided show of benefit. Throat affections, chronic digestive disorders, rheumatic troubles and gout must be ameliorated as well, not only by the influences of climate, but by the judicious use of the many different mineral waters.

Bronchial affections are practically unknown in this neighborhood, and nervous disorders are equally rare.





The Project.



WHEN the proposition was made two years ago to establish a winter and summer resort in the Eastern Valley of the Cumberland Mountains, near the Cumberland Gap, upon the plan of some of the famous European spas, to be international in character and under the direction of medical men of undoubted position in their profession, the project was regarded as an impossibility. But American enterprise has asserted itself, and under the skilful hands of a small army of earnest workers, whose ranks contain some of the most distinguished men in their respective professions in the country, Cumberland Gap Park has come to be a fact. The wild and rugged region has been brought into easy communication with all parts of the country, its natural beauties have been developed, and to-day we find an international resort quite unique in character, of which the social as well as the pecuniary success is assured.

The buildings are to be three in number, the Hotel, Sanatorium and Casino, which are situated in a beautiful park, connected by macadamized roads, and are within easy reach of the Springs. They are located upon a gentle slope, the Sanatorium occupying a site with an elevation of about 1500 feet above the level of the sea, while the Hotel is upon one slightly lower, two or three hundred yards away, and the Casino is to be midway between the two.

The grounds have been laid out under the direction of Col. Geo. E. Waring and a corps of landscape gardeners.

The buildings were designed by Mr. Wm. B. Bigelow (originally of the firm of McKim, Mead & Bigelow), a graduate of the Ecole des Beaux Arts, whose plans received a great deal of praise when they were exhibited in the collection of the American Architects' League in 1890 in New-York.

The Hotel itself is one of the largest and most magnificent of its kind in the country, and accommodates over five hundred guests. All its appointments are of the most luxurious description, and every convenience is provided for the comfort of the large class of health-seekers who come to this beautiful spot.

Great pains have been taken to secure a competent manager, and the Company has engaged Mr. Henry Clair, whose well-earned reputation as Manager of the Metropolitan, Park Avenue, and other hotels in New-York City and Chicago, as well as the Grand Union at Saratoga, is sufficient evidence of his capacity to properly preside over its hotels. He has for several months been in its service, and his great experience has enabled him to surround himself with a staff of competent aids.



"THE FOUR SEASONS."

The "Four Seasons" Hotel.



THE ground plan of the "Four Seasons" Hotel is in the form of a central building, with wings at either end at 45° to the main building; this, in conjunction with the orientation of the building, makes an arrangement by which the sun will shine into every room in the house. The main building has a front of 300 feet, and each wing a front of 200 feet, in all 700 feet; and the location is such upon the sloping hillside that the ground floor, whilst about on a level with the ten acres of formal garden in the rear, is on an average of about ten feet above the ground in front, insuring an unobstructed view of the great Cumberland Valley, with its ranges of hills on the left hand, or west, terminating in the picturesque Pinnacle Rock and the famous Cumberland Gap. On the right hand a less elevated mountain country shows range upon range of hills, and on clear days one can discern from the Pinnacle the shadowy outlines of the great Smoky Mountains. The entrance to the Hotel is in the center, with shaded piazzas along the front, connecting with the café terrace on the right, and with the ladies' entrance on the left. The road forming the main approach rises by an easy grade from the Harrogate Station, about a mile away, and, winding once or twice as it approaches to overcome the elevation, gives one glimpses of the Hotel, Casino and Sanatorium, and the general landscape.

The entrance colonnade is conceived in a style similar to the old Colonial mansions, with tall fluted columns and wide stairways, and leads to the main hall, 75 feet square — the great central distributing point, the brain, as it were, of this complex hostelry. Here will be found the clerk's office, the bureau of administration, the elevator to the upper floors, reception-rooms, reading-rooms, news-stands, telegraph office, and the many necessities and luxuries essential to comfort. Broad galleries lead to the dining-rooms, drawing-rooms, café, etc., and passing through the hall one comes out upon the formal gardens mentioned above, a space of about ten acres, which has been leveled off on the hillside, and laid out and planted by the most expert landscape gardeners. This garden is so protected by the hills behind and the buildings that the winter winds have not a chance, whilst it is open toward the south to give the cool summer breezes every opportunity.

One wing, the more southerly, has apartments on the ground floor; the other wing contains the dining-room, breakfast-room and café. The kitchen, laundry and servants' quarters generally are in a wing yet beyond, connected by a passageway.

The public rooms are worthy of a more extended description:

The dining-room is 50 by 160 feet, with a large half-circular bay on one side opening on to the winter porch enclosed in glass and heated, where meals are served overlooking the gardens; on the other side of the dining-room numerous smaller bays make pleasant corners for smaller parties, with views over the valley to the mountains. The breakfast-room opens off the dining-room between it and the café, which occupies the corner formed by the main building and the wing under the tower. Next to the café, as one passes toward the hall, are the reading, smoking and conversation rooms on the front. Passing through the hall again, we come to the salon, a great room 50 by 130 feet, with deep bay windows, open fires, and views both ways to the gardens and mountains. Beyond the salon is the ladies' entrance, with ample and separate hall, dressing-rooms and cloak-rooms, and beyond that are the private apartments on the ground floor. There is a commodious elevator and five public stairways leading to the floors above.

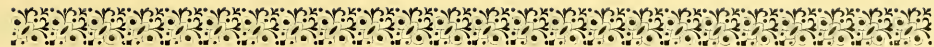
The rooms above are subdivided in the most diverse ways so as to suit every possible taste, from the great suite over the entrance, larger than the average house, to the modest bachelor's room, just large enough for his needs. But every room without exception has sunlight, fresh air and view. There are no so-called courts and no well-holes, and a special feature are the suites so arranged that one may have a parlor or large bedroom and smaller bedroom and complete bath-room, or, if desired, two large and two smaller rooms and bath, all on a private hall, so that one door closes off the whole suite from the public hallways.

The electric lighting and heating, besides the many open fires, the electric call bells, and the arrangements for prompt service, the ventilation, in fact, all the comforts and conveniences that modern ingenuity has devised, have been worked out with the greatest care, and no money has been spared to make them perfect.

The culinary arrangements embody all the latest improvements and make the kitchen well worthy a visit.

It is the aim of the management to avoid useless display and ostentation, and every arrangement has been made to secure above all things the comfort of their guests. The English and Swiss systems of hotel-keeping are those upon which that of the "Four Seasons" has been modeled, and it is intended, if good discipline and generous provision mean anything at all, that this Hotel shall be without a rival.

The "Four Seasons" Hotel is in no way intended for persons who are very ill, or whose maladies are likely to render them disagreeable to others who simply desire change or recreation; and the original idea of the projectors has been carried out so that another building in every way equally comfortable has been provided for the former, where they may have the advantages of the best medical care, treatment and nursing, yet so near the Hotel that they can be visited by their friends, and in one way, though entirely distinct in its administration, it may be said to be an annex of the latter. The additional advantages to the patient, those of quiet and rest, are very great, and to some people absolutely necessary.



CAREFUL attention has been paid to the construction of the Sanatorium, which is as well built and arranged as any structure of its kind in the world, for the architect has profited by the counsel of Dr. John S. Billings, of the United States Army, whose distinguished services in connection with the famous Johns

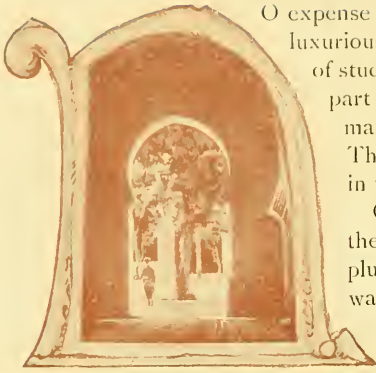
Hopkins Hospital have gained for him an international reputation. In this building all manner of new scientific and sanitary appliances have been adopted, so that the temperature can be kept at a fixed standard if necessary, while the ventilation is automatic and the walls aseptic. The institution contains accommodations for about one hundred patients, with dining-rooms, drawing-rooms, etc., and is under the charge of an executive head and two physicians selected for their experience in the treatment of the class of cases seeking the benefits of such a place. These gentlemen have been chosen after an examination by the Advisory Medical Board, which includes the names of some of the best-known physicians in America and Europe, and who have kindly consented to give the benefit of their experience and counsel to the directors of the Cumberland Gap Park Company. All of the local staff have had actual medical experience besides hospital training. The modern system of nursing is so important that graduated nurses have been engaged who have served in the Bellevue and New-York Hospital Training Schools, and a corps of uniformed male and female nurses attend to the wants of all patients in the Sanatorium. It is possible in this place to supply invalids with a most carefully selected diet, as it contains a kitchen of its own.

Much of the success which follows the treatment at the different foreign spas depends upon the medical discipline and the directions given by the resident physicians, and those who go to Cumberland Gap strictly in search of health, and who are impressed with the necessity of getting well, can follow a regimen which in every way resembles that in vogue at German and French spas.



"UNIFORM OF NURSE."

Baths.



No expense has been spared to render the Baths in the Casino as luxurious and elaborate as they can be made, and many months of study have been devoted to the proper arrangement of this part of the building, a member of the Directory having visited many of the Algerian watering places for this purpose. The Turkish Bath is in many respects modeled upon that in the Rue de l'Etat Major in the city of Algiers.

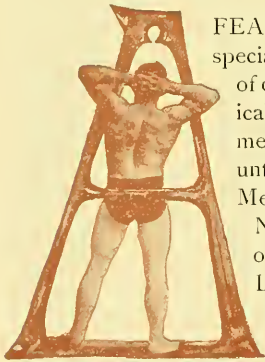
Oriental Massage and bathing may be indulged in upon the first floor of the Sanatorium, where there are several plunges and swimming pools supplied with clear spring water occupying a considerable portion of the floor space; beside these, atomizing chambers and all those various appliances of modern hydrotherapy which are now so common in France and Germany have been supplied,

and the system of forcible douches controlled by a skilled operator has also been adopted.

There is also an ingenious system of hot vapor baths, so arranged that patients can with little trouble avail themselves of medicated pine needle, sassafras, mercurial and sulphur baths; and a special apparatus has been devised for the employment of brine atomizations or dry salt baths.

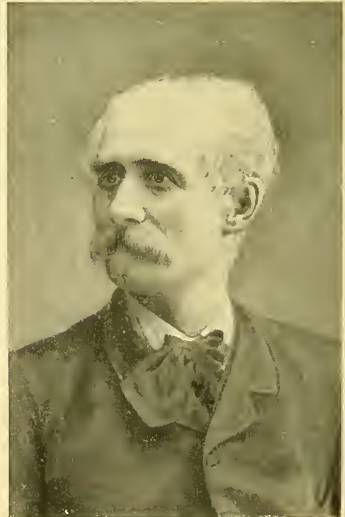


Department of Massage and Gymnastics.



FEATURE of the Sanatorium is a special department for the treatment of disease by Massage and mechanical means, which is under the immediate charge of Prof. Lindhé, until lately a director of the famous Medico-Orthopedic Institute of Norrköping, Sweden, and an ex-officer of the Swedish army. Prof. Lindhé has been engaged at a large salary, and has recently returned from Europe, where he has been in the interests of

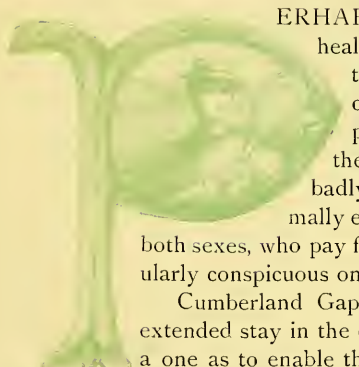
the Company investigating the latest advances in his speciality. The treatment consists of the systems originated by P. Lings, Sanders, and Metzger, the latter being that which was so successfully used in the case of the Empress of Austria, and is now universally employed throughout Europe. Mr. Lindhé also makes use of Kellgren's and Wolf's treatment.



PROF. J. E. LINDHÉ, SUPERINTENDENT OF
MASSAGE AND GYMNASTICS.



Amusements.



ERHAPS one of the most deplorable features of a majority of health-resorts is the absence of all ordinary amusement; at the best a stroll through a dull village or uninviting stretch of woods, a siesta upon a wind-swept piazza or in a dreary plastered hall, with complaining invalids as companions, is the sum of the attractions. To some of us the memory of a badly attuned band and a cold, barn-like "parlor" comes dismally enough, and the desperate efforts of the younger people of both sexes, who pay for their pleasure, and are determined to have it, are particularly conspicuous on rainy days.

Cumberland Gap Park possesses sufficient attractions to make even an extended stay in the charming mountain region of East Tennessee so pleasant a one as to enable the tired business or professional man to forget his cares, while the bright tints of health are brought to the pale cheek of the weary invalid, and even the ennui of the bored pleasure-seeker is promptly driven away.

The internal arrangements and decorations of the buildings are homelike and beautiful, while the rooms of all kinds have been arranged and furnished primarily with reference to comfort. Glass enclosed piazzas, which are well warmed, have been provided, and there is enough room for the person who desires to escape from the society of his fellows. The tables in the reading-rooms contain something besides ordinary hotel papers and garish advertising mediums; many foreign and American journals are subscribed for, and may be read before the cheeriest of wood fires and the softened light of the most perfect electric lamps.

For those who desire more active pleasures, ample lawn-tennis courts, baseball, golf and cricket grounds are designed, as well as facilities for outdoor sports of all kinds. Well-arranged billiard rooms for men and women, and a large ball-room and theater supplied with piano and organ, are to be provided in the Casino, and the theater will include a well-equipped stage.

The Casino, as its name implies, is intended to be entirely for purposes of recreation. The handsome theater is well ventilated and lighted, and from time to time regular pro-

fessional performances will be provided by the best traveling companies. Concerts are to be given here twice daily by a carefully selected band; in fact, it is the intention of the management to give this feature great prominence, and the musical tastes of all classes are consulted. During the morning the band will play at the Casino from eleven until one, and again in the afternoon. Two regular dances on Wednesday and Saturday nights are given in the ball-room, and the services of the band may be engaged for private dinners and performances at other times.



IT will be seen that the different buildings are in every way distinct, and that the tastes and conditions of all the guests are carefully looked after. The real invalid has the quiet and attention his condition demands, whilst he who goes for simple rest is spared the noise and gaiety of the ordinary health-resort, and the pleasure-seeker has all he can desire in the way of amusement, without annoyance to others.





Springs.



WATER is abundant and pure, for this region, like that about it, contains a large number of mineral springs, which run from the base of the Cumberland Mountains. Not only is an ample supply of spring water found, which percolates the lime and freestone of this district, but medicinal waters are plentiful.

Many of the springs are rich in iron, and of course vary greatly in strength, as do the sulphur waters. The latter are of the familiar kinds popularly known as black, red, yellow and white, and specimens examined were found to contain free sulphur or various sulphurets. The escape of sulphureted hydrogen, discovered in two of the springs, is very considerable.

One spring near the Company's property contains alum, in this respect resembling the water from the far-famed Virginia sources. The supply of water for ordinary purposes is very great, and a large spring of purest water upon the Company's property supplies all demands, the flow being estimated at several hundred thousand gallons per day, which is stored in a reservoir near Hamilton's Peak.

The two chief medicinal springs in Cumberland Gap Park have been known for over a century, and for at least one hundred years have had a great local reputation, which dates from the time when the Indians camped about their banks, and it has been the custom since, during the summer season, for persons from the surrounding country to pitch their tents in the Poor Valley. The flow from the Sulphur Spring is over ten thousand gallons per day, and from the Chalybeate Spring, a few feet away, about twice that quantity.

Prof. R. A. Witthaus has made a careful examination, transporting a large amount of apparatus for exact investigation on the spot, and for the collection of water to be submitted to a quantitative analysis at his laboratory in the University Medical College of New-York City.

His report is appended, and shows that the Sulphur Spring is especially rich, containing both sulphur and lithia—a combination which will commend itself to physicians as of great value in rheumatic, gastric, cutaneous and nervous disorders.

The Chalybeate water is well adapted to delicate persons who desire the beneficial effects of iron without any resulting gastric disturbance or head fullness.

Report No. 1.

R. A. WITTHAUS,
Professor of Chemistry and Physics.

LABORATORY OF CHEMISTRY.
UNIVERSITY OF THE CITY OF NEW-YORK.
MEDICAL DEPARTMENT, 410 EAST 26TH ST.
NEW-YORK, December 28, 1890.

DR. ALLAN McLANE HAMILTON, *Pres. Cumberland Gap Park Co.*

SIR: An analysis of the water from the Sulphur Spring upon the Company's property shows it to have the following characters:

Temperature, 60° F. (Air temperature, 87° F.)	
Total solids — dried at 356° F.	248.48
Specific Gravity, 1000.33.	
	<i>Parts per million.</i>
Chlorin	7.82
Hydrogen sulphid	5.125
Sulphuric acid	20.94
Carbonic acid	280.13
Silicic acid	20.00
Nitric acid	trace
Ferric oxid	1.14
Aluminium oxid	0.42
Calcium oxid	38.60
Magnesium oxid	27.62
Sodium chlorid	94.13
Lithium chlorid	1.75
Potassium chlorid	3.39
Manganese oxid	trace

These constituents are combined with each other in the water as follows:

	<i>Parts in 1,000,000.</i>	<i>Grains in U. S. Gall. 231 c. m.</i>
Calcium sulphate	35.61	2.0771
Calcium bicarbonate	69.16	4.0341
Magnesium bicarbonate	100.72	5.8750
Ferrous bicarbonate	2.53	0.1456
Sodium sulphid	2.78	0.1621
Sodium chlorid	12.89	0.7519
Sodium bicarbonate	110.55	6.4484
Potassium bicarbonate	4.54	0.2648
Lithium bicarbonate	2.81	0.1639
Alumina	0.42	0.0245
Silica	20.00	1.1666
Total solids	362.01	21.1140
Less water and carbonic acid in bicarbonates	113.37	6.6129
Fixed solids	248.64	14.5011
Fixed solids, dried at 356° F.	248.48	14.4938
Free carbonic acid	118.98	6.9401
Sulphureted hydrogen	5.13	0.2992

Report No. II.

An analysis of the water from the Chalybeate Spring upon the Company's property shows it to have the following characters:

Temperature, 65° F. (Air temperature, 87° F.)	
Specific Gravity, 1000.44.	
Total solids—dried at 356° F.	188.02

Parts per million.

Chlorin.	3.24
Sulphuric acid	69.52
Carbonic acid	147.84
Silicic acid.	22.54
Titanic acid.	traces
Nitric acid.	traces
Ferric oxid	8.35
Aluminium oxid	0.26
Calcium oxid.	35.56
Magnesium oxid.	20.82
Sodium	5.11
Potassium	3.78
Manganese	traces
Lithium	traces

These constituents are combined with each other in the water in the following manner:

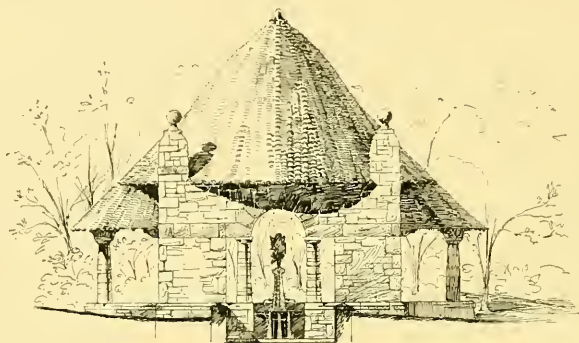
	<i>Parts in 1,000,000.</i>	<i>Grains in U. S. Gall. 231 c. m.</i>
Sodium chlorid	5.34 ..	0.3105
Sodium sulphate	9.27 ..	0.5407
Potassium sulphate	8.41 ..	0.4906
Calcium sulphate.	55.41 ..	3.2321
Magnesium sulphate.	41.78 ..	2.4370
Magnesium bicarbonate	25.13 ..	1.4658
Calcium bicarbonate.	36.58 ..	2.1337
Ferrous bicarbonate	18.58 ..	1.0838
Silica	22.54 ..	1.3148
Alumina	0.26 ..	0.0152
Titanic acid, Lithium bicarbonate, Manganese bicarbonate, Ammonium nitrate.	traces	
Total solids	223.30 ..	13.0242
Less carbonic acid and water in bicarbonates	35.00 ..	2.0416
Fixed solids	188.30 ..	10.9836
Fixed solids, dried at 356° F.	188.02 ..	10.9672
Free carbonic acid.	103.66 ..	6.0465

Respectfully submitted,

R. A. WITTHAUS.

The two main springs are situated about a mile from the Hotel, and can be reached by comfortable walks or bridle paths, so that exercise, a most valuable adjunct, is provided, though weak and delicate invalids are supplied with the mineral waters at the Sanatorium or Hotel.

At Hamilton Springs an artistic Spring-house and fountain have been erected in the midst of a small park, which is less than a mile from the Sanatorium. One mile up the valley are the Dillwyn Springs, which consist of two black sulphur, one white sulphur, and several chalybeate springs.



THE SPRING-HOUSE.

No region and no group of mineral springs, even Schwalbach, will offer to anæmic invalids the relief that is to be found at Cumberland Gap; and for persons suffering from locomotor ataxia, as well as other spinal affections, the provision of sulphur water and the peculiar character of the climate possess advantages superior to those of Southern France, or other regions which are popular with Continental physicians; and for epileptics the benefits of a locality with this altitude, and the facilities for outdoor exercise without fatigue cannot be overestimated.

At the suggestion of Prof. Proctor, of the Kentucky State Geological Survey, an artesian well has been bored at very great expense, so that the Blue Lick water, which is peculiar to this district, it is expected, will be tapped at a point about 1400 feet below the surface and beneath the underlying shale.





Caves.

ON the eastern bank of the Powells River is a large Cave, which has already been explored for a distance of nine or ten miles without the end being reached. Its discovery by its present owners and opening up is a matter of only a few months, although its existence has been known to the natives for many years, and during the war it was a place of hiding for refugees and deserters from both armies. The writer recently made a tour of inspection with Mr. F. Randolph Curtis, and found the existence of many curious and beautiful objects of interest. Unlike the Mammoth Cave, it has not suffered at the hands of sight-seers, who break off the stalactites and scribble their

names upon the walls. Little injury or blackening has resulted from the use of torches, or smoke from other sources, and the exquisite coloring is probably as it always has been. From all accounts, the cave is larger than the Mammoth Cave of Kentucky, or, in fact, any other cavern in the country, and abounds in the most curious and grotesque calcic formations. Very little imagination is required to recognize at once the figures of reptiles, animals, heathen gods and other strange things which have been created by the deposition of lime; and the exquisite chambers, filled with massive and graceful columns formed of fringes of small glistening white stalactites, impress the observer more deeply than can any description. In many of the chambers, which are from 50 to 100 feet in height, are fern-like pendants of glistening white or fawn-colored brown, and at different places are exquisite springs which empty into a rushing torrent in the western gallery and finally into the Powells River, 150 feet below. It would seem as if Nature had provided aids for the sight-seer, for at one point a veritable balustrade of stalagmites borders a steep path to an immense vaulted chamber, containing a petrified waterfall nearly 40 feet in height that has taken the place of an actual cataract which existed at some remote period. One of the most



"THE HAYSTACK."

beautiful formations is what is known as "The Haystack," and is about the size of one of those familiar objects, resembling it in shape, but that in the Powells River Cave formation is made up of millions of drooping pendants of snowy whiteness. The reader is referred to the Guide Book published by the Cave Company for a minute description of details which cannot here be gone into.

Recent experiments, conducted by Colonel Crump at the Grand Avenue Cave, show that it is possible to conduct the air to buildings above the ground, and to maintain a constant temperature with very great atmospheric dryness.

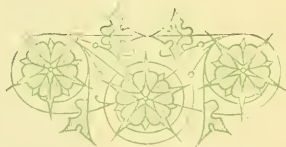


The great advances in bacteriology have shown how deleterious are the effects of air in which any considerable quantity of dust is suspended and, in fact, of the direct relation of dirt to disease. If the air of a large cave, where germ life does not exist to any extent, can be used in respiration, there can be no doubt of the fact that not only invalids, but all others, must thrive much better than under ordinary circumstances. Colonel Crump, whose experiments were described in *Science*, May 9, 1890, was able to keep the air in a building located above this cave at a temperature of 50° throughout the year in a properly constructed building. "Although, as far as it is known, the proposal to make a therapeutic use of cave air

is quite original, it is known that in various parts of Italy dwellings built near caves have been ventilated by means of air drawn from the caves by windmills. In Paris the Palace of the Trocadero is cooled by the air drawn from great disused stone quarries over which it is built. By means of fans driven by steam engines, about 3,000,000 cubic feet of air are forced into the building each hour, furnishing abundant ventilation for the great auditorium."

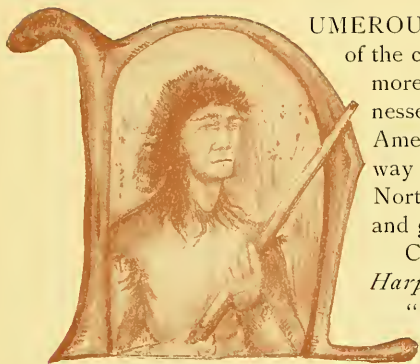
The proximity of the large cave on the Powells River to our property is one of great value, and it is proposed in time to utilize its air.

Omnibuses run regularly from the Hotel to the Powells River.





Historical.



NUMEROUS historical associations are connected with this part of the country. The region is full of interest, and possibly more stirring events have taken place in the mountain fastnesses of Eastern Tennessee than almost anywhere else in America. The early settlers of Kentucky first found their way through the Cumberland Gap, and Dr. Walker, of North Carolina, in 1747 discovered the State of Kentucky, and gave to the mountains their present name.

Charles Dudley Warner, in an interesting article in *Harper's Monthly Magazine* for January, 1889, says:

"In 1779 Virginia resolved to construct a wagon-road through the wilderness, but no road was made for many years afterward, and indeed no vehicle of any sort passed over it until a road was built by action of the Kentucky Legislature in 1796.

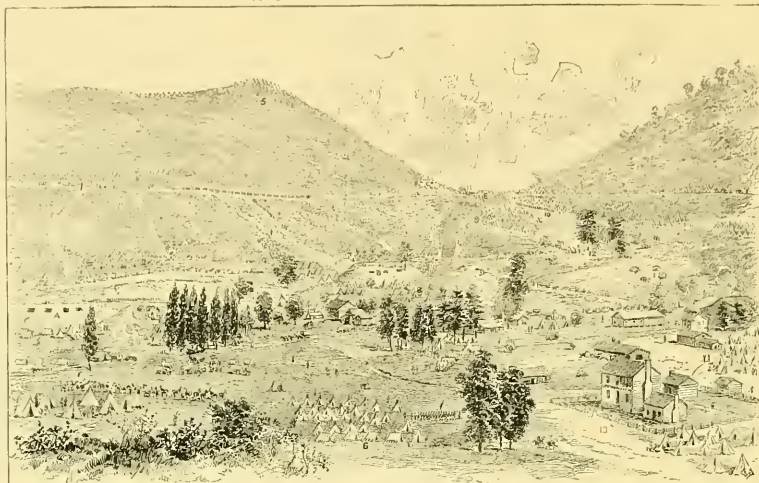
"At the time of the settlement, New-York west of the Hudson, Western Pennsylvania and Western Virginia were almost unoccupied except by hostile Indians; there was only chance and dangerous navigation down the Ohio from Pittsburgh, and it was nearly eight hundred miles of a wilderness road, which was nothing but a bridle-path, from Philadelphia by way of the Cumberland Gap to Central Kentucky. The majority of immigrants came this toilsome way, which was, after all, preferable to the river route, and all passengers and produce went that way eastward, for the steamboat had not yet made the ascent of the Ohio feasible."

Curious as it may seem, this wild and lonely region, which until a year or two ago did not contain half a dozen houses, was at one time, just before the Revolution, occupied by a fair number of people. Some workmen, while excavating for the Middlesborough Hotel, found a curious flat stone which covered the remains of Colonel Campbell, a Revolutionary officer and patriot.

The peaceful valley which is now the property of the Cumberland Gap Park Company, in which the town of Harrogate is situated, was less than a quarter of a century ago the scene of some rather active fighting. The Southern army was forced down from Kentucky through the Cumberland Gap, and Day's battalion, which included the Twelfth Confederate Cavalry, remained in stubborn possession of the Powells River Valley. The cavalrymen had been defeated at Perrysville, and subsequently were driven to Murfreesborough, where they joined Johnstone. As a commentary upon the change that has taken place, an incident that suggests the conversion of the sword into the plowshare, it may be stated upon the authority of G. B. Hayes, a Southern soldier now at work upon the Company's buildings, that one of the Northern batteries was thrown up upon the site of the present

Sanatorium, and successfully drove Hayes's company from the woods beyond. Beside other positions Hamilton's Peak was occupied by the Northern forces with a battery, and many of the projectiles and grapeshot that have been turned up by the plows in the Hotel gardens were thrown from this elevation.

Copyright in *Battles and Leaders of the Civil War*, 1884-1888, by THE CENTURY CO.



By permission of THE CENTURY CO.

CUMBERLAND GAP DURING THE WAR.

Most of the refugees passed through Cumberland and Baptist Gaps, and after the battle of Walden's Ridge, fourteen miles south, there was quite an exodus through the latter.

Every inch of the country was contested for by the opposing forces, and when they withdrew it was taken possession of by the bushwhackers and camp-followers. Many a weary prisoner has found his way, traveling by night over the Gap road, and hiding by day in the woods or in the many curious caverns, one of which strikingly resembles that described by J. T. Trowbridge in his clever war story, "Cudjoe's Cave."



"THE FATE OF A SPY."

To the historian and anthropologist, Cumberland Gap and its environs will prove of the greatest interest, for the original settlers themselves are an exceedingly interesting people. Prior to the settlement of the Yellow Creek Valley the natives practically made their own laws and did about as they chose. While punctilious to the last degree, honorable and generous to a fault, they placed little value upon human life, and indulged in the feuds which were so common in certain parts of the South and Southwest. No Corsican vendetta was more fierce than some of those which have resulted in the extermination of certain families in this immediate region. Happily since the influx of settlers and the influence of civilization this violence is largely a thing of the past, and many of the survivors are prosperous and useful members of the community.

Mr. Warner's charming description of a ride he took through Cumberland Gap before the developments of the English syndicate is appended, and conveys a faint idea of the beautiful scenery of the region :

"We drove from Pineville to Cumberland Gap, thirteen miles, over the now neglected Wilderness Road, the two mules of the wagon unable to pull us faster than two miles an hour. The road had every variety of badness conceivable — loose stones, ledges of rock, boulders, sloughs, holes, mud, sand, deep fords. We crossed and followed up Clear Creek (a muddy stream) over Log Mountain (full of coal) to Canon Creek. Settlements were few — only occasional poor shanties. Climbing over another ridge, we reached the Yellow Creek Valley, through which the Yellow Creek meanders in sand. The north side of Cumberland Mountain, like the south side of Pine, is a conglomerate covered with superb oak and chestnut trees. We climbed up to the mountain over a winding road of ledges, boulders, and deep gullies, rising to an extended pleasing prospect of mountains and valleys. The pass has an historic interest, not only as the ancient highway, but as the path of armies in the civil war. It is narrow; a deep road between overhanging rocks. It is easily defended. A light bridge thrown over the road, leading to the rifle-pits and breastworks on the north side, remains to attest the warlike occupation. Above, on the bald, highest rocky head on the north, guns were planted to command the pass. Two or three houses, a blacksmith's shop, a drinking tavern, behind which on the rocks four men were playing old sledge, made up the sum of its human attractions as we saw it.

"Just here in the pass Kentucky, Tennessee and Virginia touch each other. Virginia inserts a narrow wedge between the other two. On our way down the wild and picturesque road we cross the State of Virginia. . . . We passed a magnificent spring, which sends a torrent of water into the valley, and turns a great millwheel — a picture in its green setting — saw the opening of the tunnel, with its shops and machinery, noted the few houses and company stores of the new settlement, climbed the hill and sat down to look at the scene. The view is a striking one. The valley through which the Powells River runs is pleasant, and the bold, bare mountain of rock at the right of the pass is a noble feature in the landscape. With what joy must the early wilderness pilgrims have hailed this landmark, this gateway to the Paradise beyond the mountains! Some miles north in the range are the White Rocks, gleaming in the sun and conspicuous from afar, the first signal to the weary travelers from the east of the region they sought. The valleys and sides of these mountain ranges (which have a uniform elevation of not much more than 2000 to 2500 feet) enjoy a delightful climate, moderate in the winter and temperate in the



"THE PINNACLE."

summer. This whole region, when it is accessible by rail, will be attractive to tourists."

The Pinnacle itself has always been used as a place for observation by the Indians and scouts, for the view from its crest is surpassed by none in America for panoramic effect.

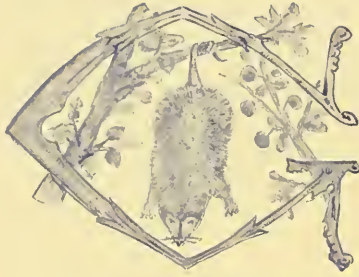
Before the war the Gap was a favorite highway for settlers emigrating to the far West, and over its beautiful roads most of the Southern planters journeyed from the southwest to the springs of Virginia and the Atlantic seaboard. These journeyings were expensive and luxurious, for in ante-bellum days there was an extravagance and luxury which has never been seen since. People came from New Orleans in coaches and four, and camped at night by

the roadside with all the paraphernalia and magnificence of an Eastern caravan.

The forerunner of the present summer cottage is to be found at a neighboring spa in the form of a curious Continental little building, which was occupied by the Hamptons just after the Revolution, and at which General Washington was often entertained.



Hunting and Fishing.



AME is abundant in this region, and despite the incursions of outsiders, the noisy hammer of the carpenter, or the puffing of the locomotive, the birds have not been driven away from their familiar haunts and are still within easy reach. Common quail, or "Bob White" (*cor-tunix vulgaris*), is perhaps the most abundant, and it is no uncommon thing for four guns to bring in 160 birds a day. Grouse and partridge, though more scarce, are frequently met with in the Cumberland Mountains. Snipe of many varieties stop in their flight, and in certain seasons of the year are very numerous. The wild turkey (*meleagris gallopavo*) is often seen, and is more common in this region than in western North Carolina; fourteen have been killed this year upon the Company's property, and at a point not a quarter of a mile distant from the site of the Hotel. Woodcock are scarce, though occasionally found, and the same may be said of larger game. Quail shooting may be pursued in the manner so common in this country, namely, on horseback, and to those who have not tried this kind of shooting the experience is a decidedly agreeable one, and is equally well suited to invalids who are unable to tramp through the fields.

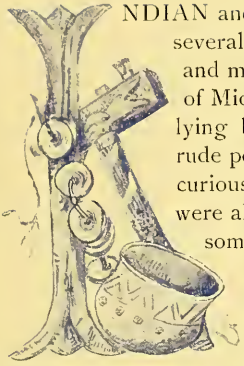
A vast quantity of small game, which some sportsmen may consider beneath their notice, may tempt persons of less exacting tastes, and considerable sport is to be derived from the amount of "'coons and 'possums"; while the possessor of his first gun will find gray and red squirrel, meadow larks, and a great number of small birds upon which to try his prowess.

Upon the Powells River, in season, a goodly assemblage of ducks of many varieties are to be obtained by going four or five miles.

In the mountains several miles away deer and bear exist in considerable numbers, and are occasionally brought into Middlesborough and Pineville. In fact, less than a year ago a fine buck was killed in the main street of the latter city. But the lazy sportsman can nearly always find shooting in the forests, or the hills around the Company's property. In the Powells River and the small mountain creeks, trout, bass, pickerel and other fish may be taken by the angler. Competent guides can be obtained by application at the office of the Hotel.

Fox-hunting, introduced by the English settlers of this region, is indulged in many times a year, and it is proposed regularly to have "meets" during the Winter season.





NDIAN and prehistoric remains are found everywhere in this neighborhood, and in several places in the Yellow Creek Valley large mounds have been excavated, and many curious relics unearthed. At one, almost in the center of the city of Middlesborough, the writer in 1888 found a large number of human bones lying between strata of charcoal, and in various places were collections of rude pottery similar in some respects to that of Aztec make, stone beads and curious small plaques of stone from one to two inches in diameter. There were also conch shells which evidently had been brought from the seacoast at some remote period.

A reference to the Smithsonian reports, and other literature on the subject, will enable the reader to learn much of the habits of the aborigines of Eastern Tennessee and Western Kentucky, whose mounds are plentiful throughout this part of the country. The proximity of Central Kentucky will place the visitor, whose tastes lead him to explore and study the prehistoric relics which abound, near the various saline springs, licks, and sink-holes, where human and mammoth remains have been exhumed from time to time during late years.



Places of Interest, and Drives in the Neighborhood.



ACADAMIZED roads have been built during the past two years, so now, unlike most Southern Winter resorts, the region about Cumberland Gap possesses the advantages of abundant facilities for driving and walking. With the coöperation of the American Association and the Harrogate Town Company, almost *twenty* miles of good roads of this character have been constructed or are in process of construction, and the visitor is enabled to make excursions to the many points of interest in the neighborhood. To those who have spent their Winters in the South, and have been confined to hotel piazzas when the mud in the ordinary roads was over their shoe tops, or when even riding or driving was uncomfortable or dangerous, the advantage of this condition will be seen at a glance.

In addition to these roads numerous bridle paths have been made through the woods in all directions, and one of them along the crest of the Poor Valley ridge leads to Hamilton's Peak, which commands a view nearly eighty miles in extent.

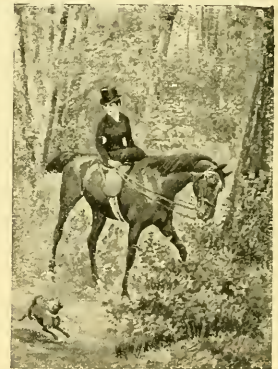
Hamilton Springs, $\frac{1}{2}$ mile. *Arthur*, 1 mile. *City of Middlesborough*, 4 miles. *Yellow Creek Valley*. This drive should include a visit to the mammoth open hearth Basic Steel plant of the Watts Steel & Iron Syndicate; and the important mines and industrial plants of this young city; a ride upon the Belt Railroad; and a drive to Bennett's Fork and Stony Fork Gulches.

Beside these drives, numerous excursions may be made on horseback, and visitors are recommended to inspect the Mingo Mountain and other coal mines, as well as the iron mines upon the property of the American Association, the works of the Cumberland Gap Ice Company, etc., etc.

Powells River, 4 miles. *Powells River Cave*, $4\frac{1}{4}$ miles. A whole day should be taken for this trip, and in fact two or three days may be devoted to the inspection of the great chambers of the vast cavern. The Powells River Cave Company will provide guides and all the facilities for exploration.

Tazewell, 12 miles. Tazewell is a most interesting old revolutionary town which was founded by Irish refugees toward the end of the last century. It contains several curious old brick mansions, a Court House, and the public gallows. Much of the old town was destroyed by fire during the war, but enough remains to reward the visitor.

The beautiful *Clinch River*, distance 6 miles. The *Pinnacle*, 2 miles. *King Solomon's Cave*, $1\frac{1}{2}$ miles. *Dillwyn Springs*, $1\frac{1}{2}$ miles. *Fortifications of Cumberland Gap*, 2 miles.





How to reach Cumberland Gap Park.



SEVERAL railroads run through the tunnel beneath the Gap and stop at Harrogate Station or Cumberland Gap Station, near the Park.

Cumberland Gap may be reached from the North and Northeast by the Pennsylvania, Shenandoah Valley or Richmond & Danville, via Norfolk & Western and Louisville & Nashville R. R. (Harrogate Station).

From Cincinnati by the Louisville & Nashville R. R. by way of Louisville and Middlesborough, or else again by the Queen & Crescent, or Central Kentucky to Junction City or Livingston, where connection is made with the Louisville & Nashville.

From Knoxville and the South by the Knoxville and Cumberland Gap and Louisville R. R.

Pullman Buffet Sleeping Cars and Chair Parlor Cars are run from principal points.

Distance, Cumberland Gap.

From Chicago, 541 miles, via Louisville, New Albany & Chicago R. R. (Mono Route) to Louisville, thence Louisville & Nashville R. R.

Louisville, 219 miles, via Louisville & Nashville R. R.

Cincinnati, 329 miles.

Knoxville, 69 miles.

Chattanooga, 181 miles, via East Tenn., Va. & Ga. R. R. to Knoxville.

Asheville, N. C., 141 miles, via East Tenn., Va. & Ga. R. R. to Knoxville.

Hot Springs, N. C., 107 miles, via East Tenn., Va. & Ga. R. R. to Knoxville.

St. Augustine, Fla., 721 miles, via Jacksonville, St. Augustine & Halifax River R. R. to Jacksonville, Savannah, Florida & Western R. R. to Jessup, Ga. & E. T., Va. & Ga. R. R. to Knoxville.

Washington, D. C., 576 miles.

Philadelphia, 712 miles.

New-York, 802 miles.

Boston, 1036 miles.

Time, Cumberland Gap.

From Louisville, 11 hours.

Cincinnati, 15 hours.

Knoxville, 4½ hours.

Asheville, 10 hours.

St. Augustine, 31 hours.

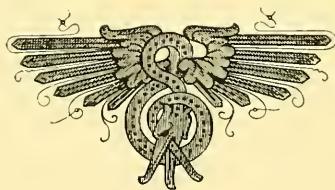
New-York, 22 hours.

Boston, 28 hours.

The routes from the North and East bring the tourist through much of the territory which was fought over during the late war. The country traversed by either the Norfolk and Western, or Richmond and Danville Railroads is full of the most exquisite scenery, and the traveler may stop over on the way at many of the famous watering-places of Virginia or North Carolina. Cumberland Gap is in the direct line of travel from the West and Northwest, and should be visited by everyone who makes the tour of the southern cities. It is in the circle of winter and summer resorts, which includes the White Sulphur and Warm Springs of Virginia, Old Point Comfort, Virginia Beach, Asheville, and Warm Springs of North Carolina, Lookout Mountain, Tampa and Saint Augustine, besides many other popular places.

Visitors to the World's Fair, therefore, should include this exquisite place in their itinerary.

For plans of rooms, terms or other particulars, address Mr. Henry Clair, Cumberland Gap, Tenn., or 58 William Street, New-York City.



The buildings of the Cumberland Gap Park Co. will be furnished in the most substantial and elegant manner, and after much consideration the following firms have been chosen, whose standing vouchsafes the excellence of their products.

Furniture.

(Expressly Manufactured.)

NELSON MATTER & CO.

Grand Rapids, Mich.

NEW-YORK WAREROOMS: 18, 20 & 22 East 18th Street.

J. W. WHEELOCK, Manager.

Carpets.

(Manufactured and Imported.)

W. & J. SLOANE,

Broadway, Eighteenth & Nineteenth Sts.

NEW-YORK CITY.

Silver-Plated Ware.

GORHAM MANUFACTURING CO.

Silversmiths and Mfrs. of "Gorham Plated Ware,"

Broadway & 19th St.

NEW-YORK.

137 & 139 State St.

CHICAGO.

Linens, etc.

ARNOLD, CONSTABLE & CO.

Fifth Avenue, Nineteenth Street & Broadway,

NEW-YORK.

China and Glass Ware.

(From Special Designs.)

L. STRAUSS & SONS,

42, 44, 46 & 48 Warren Street,

NEW-YORK.

Bedding, etc.

FRANK A. HALL,

168 Centre Street,

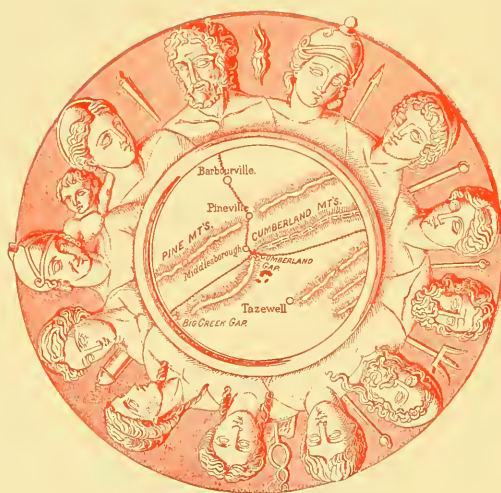
NEW-YORK.

Fifteen feet north of Canal Street.

Ranges and Kitchen Apparatus.

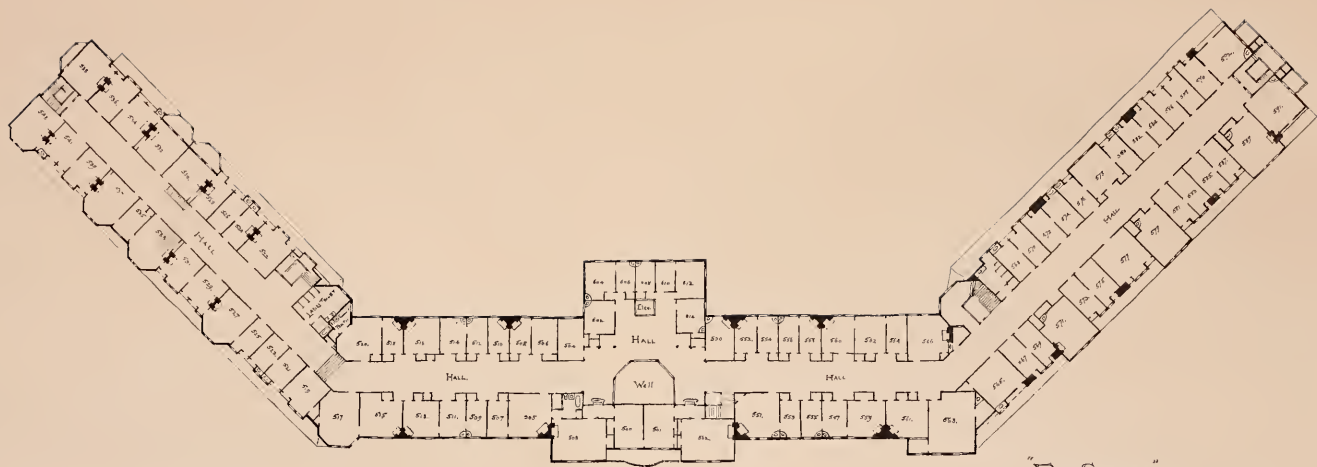
BRAMHALL & DEANE,

New-York.



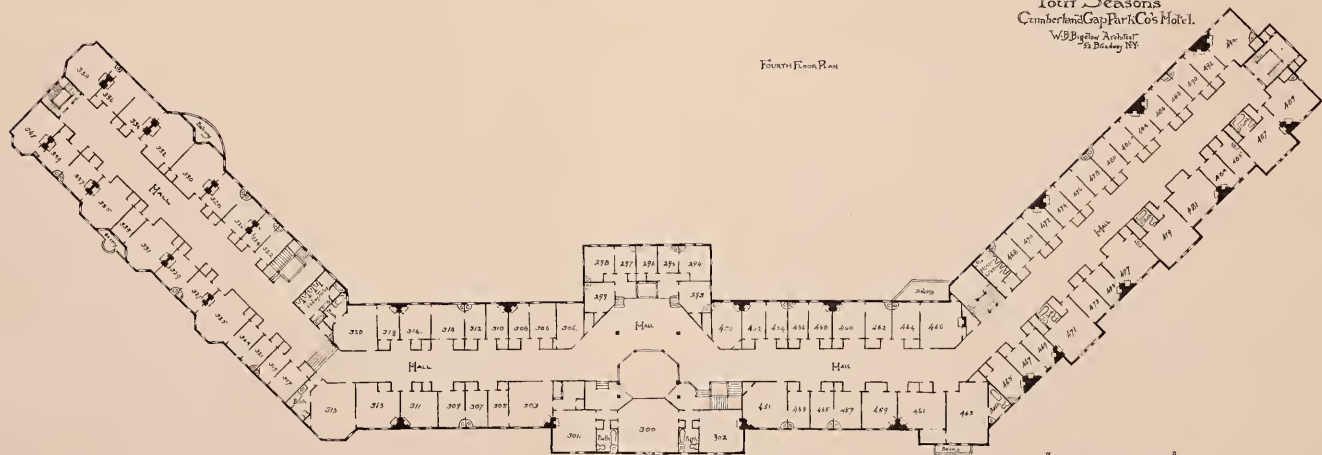
"THE FAIREST PLACE."

Lysias.



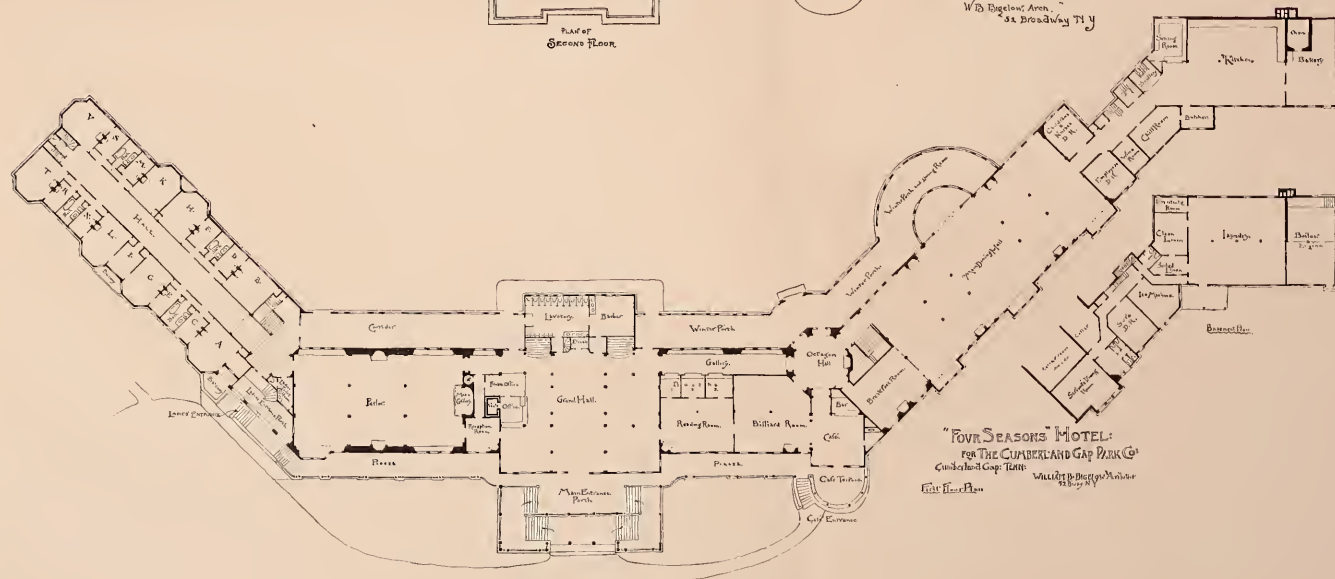
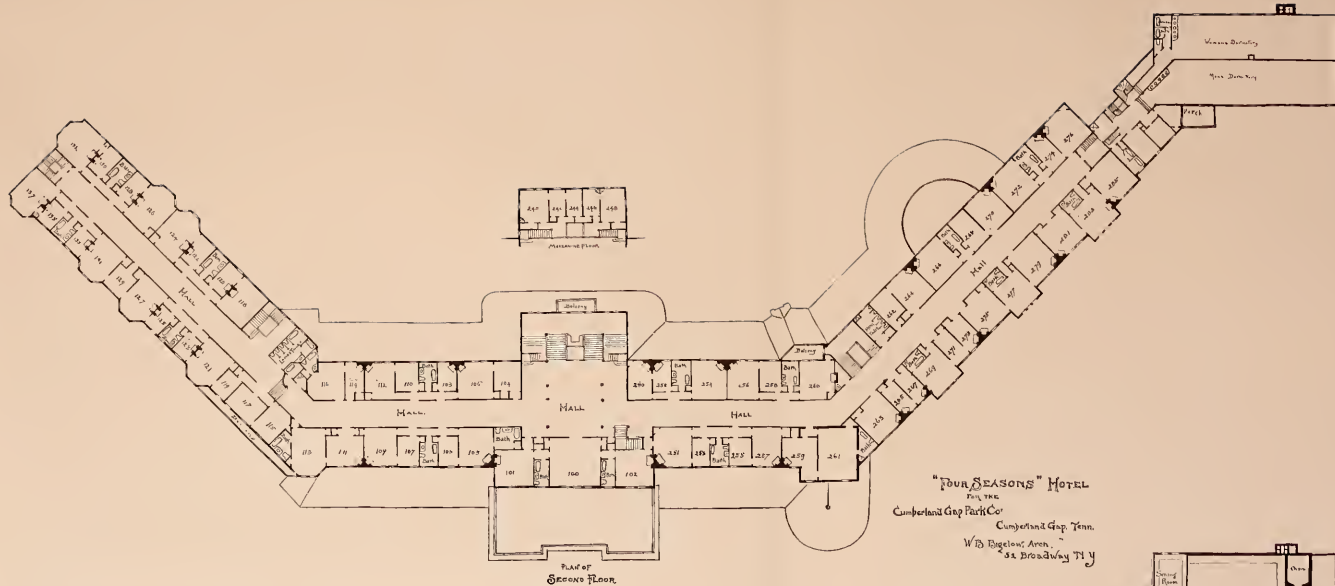
"Four Seasons"
Cumberland Gap Park Co's Hotel.
W.B. Bigham Architect.
25 Broadway N.Y.

FOURTH FLOOR PLAN

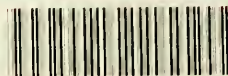


"Four Seasons"
Cumberland Gap Park Co's Hotel.
W.B. Bigham Architect.
25 Broadway N.Y.

* THIRD FLOOR PLAN *



LIBRARY OF CONGRESS



0 014 649 544 8

